



COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
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**Policy On Metering Requirements**  
**For Water Management Act Registrants And Permit Applications**  
(Year 2000 Printing)

Effective Date: 12-17-88  
Program Applicability  
Supersedes Policy, SOP or Guidance #:  
Approved by: Patricia L. Deese

**Policy, SOP or Guideline # 88-25**

This policy is adopted to provide proper accounting of registered and permitted withdrawal volumes under the Water Management Act (M.G.L. Chapter 21G). It is in accordance with the following principles stated in section 3 of the Water Management Act (M.G.L. Chapter 21G):

- to ensure an adequate volume of water for all citizens of the Commonwealth and;
- to assure comprehensive and systematic planning and management of water withdrawals and use in the Commonwealth.

**Policy**

It is the policy of the Division of Water Supply that metering be imposed as a condition of registration or of a permit under the Act and accompanying regulations (310 CMR 36.00), as follows:

1. Metering of withdrawals will be required for all municipal and industrial systems covered by the Act.
2. Metering should be done at the source in addition to customer-service metering, discharge point metering or other metering.
3. To obtain a verified withdrawal registration for golf course withdrawals from stationary withdrawal points, metering will be required. Metering requirements may be phased in over a period of years, as determined by the Department.
4. Metering will in most cases be required to verify agricultural withdrawals from stationary withdrawal points. The maintenance of water use logs will be required for those withdrawal points utilizing portable pumps except in unusual circumstances.
5. In those instances where metering of water use is required the meter must comply with the latest revisions of the American Water Works Association (AWWA) standards (C700 Series) and/or specific state or local requirements.
6. Where an AWWA standard for a meter is not available, the user must demonstrate to the satisfaction of the Department that the meter is capable of measuring not less than 95% and not more than 105% of the water that passes through the meter. If the owner does not have suitable means for testing, he/she can submit to the Department a certificate from the manufacturer showing that the meter has been tested for accuracy of registration.

7. Annual calibration of meters will be required with documentation provided in each annual report.
8. Registrants submitting metered data from meters that have not been calibrated since December 1980 shall receive estimated registrations.
9. DEQE will continue to consider requests for exceptions to this policy from groups representing a particular category of water withdrawals.

Approved: 12-01-88  
Effective: 12-17-88

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Patricia L. Deese, P.E.  
Director  
Division of Water Supply

## **Attachment To DWS Policy #88-25**

### **AWWA Standards: C700 Series**

The AWWA Standards describe minimum requirements for various meter types and represent a consensus of the water supply industry that a product designed to such standards will provide satisfactory service. These standards apply only to cold-water meters. They do not include standards for large meters (36" and up) and do not cover some of the more recent electronic devices currently on the market. The standards are revised approximately every 5 years. A summary of the AWWA C700 series of standards and references follows:

<b><u>Standard</u></b>	<b><u>Status/Use</u></b>
C700 Displacement Type Meter	-Standard revised 1977 -Covers sizes 5/8"-6meters -Household or small commercial uses -AWWA is considering revising the standard to include only up 2" meters.
C701 Turbine Type Meter	-Standard revised 1978 -Covers sizes 1 1/2"-12" meters -Large commercial uses of water utilities
C702 Compound Type Meter	-Standard revised 1986 -Covers sizes 2"-10" -Commercial, industrial, and institutional uses where a wide range of flow rates are encountered
C703 Fire-Service Type Meter	-Standard revised 1986 -Covers sizes 3"-10" -Designed to measure the amount of water used for fires and domestic purposes at the lowest possible loss of pressure. Also used as master meters to measure widely variable flow rates from reservoirs and other water services.
C704 Propeller Type Meter	-Standard reaffirmed 1984 -Covers sizes 2"-36" -Used by large utilities or commercial users with flow at a constant rate
C705 Meter Testing	-Standard withdrawn
C706 Direct-Reading remote Registration Systems	-Standard revised 1986
C707 Encoder Type Readout Decice	-Standard revised 1982
C708 Multi-Jet Meters	-Standard revised 1982 with addendum in 1983 -Covers size 5/8"-2" -Single family house and small commercial applications.

**Source:** Ed Baruth, Standards Engineer, Department of Standards, AWWA (phone conversation April 21, 1987)

**References for Additional Information On Meters:**

AWWA Manual of Practice No. 2-Sizing of Water Service Lines and Meters

AWWA Manual of Practice N. 6-Water Meters-Selection, Installation, Testing and Maintenance

Copies of standards available from:

AWWA, 6666 West Quincy Ave, Denver, CO 80235      (303) 794-7711